MOTORCYCLE OPERATION MANUAL

360133231-0001

Preface

Thanks for purchasing this type of motorcycle!

This user manual introduced the main specification, basic structure, adjustment method and maintenance skill of this motorcycle. The user manual makes you know well about the basic operation, and how to eliminate common malfunction, makes motorcycle fully play its performance, decrease malfunction, and prolong its service life.

Future structural changes may occur on this model and may lead to difference between user manual and actual motorcycles, and following-up improvements subject to change without notice.

Warning/Caution

Read this book and keep firmly in mind the essentials. We use words such as “Warning”or “Caution” for differentiating the importance of issues need be paid attention to, please carefully comprehend their exact definition.

Warning — —This word indicates the issues involved personal safety of driver, neglect of this issue may lead to injury.

Caution — —This word indicates issues need to be paid attention to and related to motorcycle operation and its maintenance.

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Matters need pay attention to

Various spare parts on market could be installed on your motorcycle, but for us, direct control for their quality and compatibility is impossible. Unsuitable spare parts may endanger the driver. Although complete inspection for all spare parts on market is impossible, your sales distributors help you select spare parts with high quality and then correctly installed.

For your careful purchasing and installation of spare parts, we provide general criteria for reference for deciding which parts should be installed and to know its installation method.

（1） All accessories with extra weight, or the one face to upwind, its installation position should be as low as possible, close to motorcycle body and its center of gravity. Luggage rack and its accessories should be carefully checked, confirm its firm installation. Weak installation may lead to deviation of gravity center which produce danger.

（2） Check ground clearance and angle of installation accessories, improper installation may harm to safety. Impediment to mechanical performance of shock absorber, turning and controlling system is not allowed and should pay a special attention to.

（3） In case install accessories on handle bar or front fork, serious imbalance may be led. Extra weight on front motorcycle may decrease sensitivity of turning, lead to shock on front wheel and unstable driving. Decrease the weight of accessories installed on handle bar and front fork to minimum level in case it is indeed needed.

（4） Windshield plate, back-rest, saddle bag, and suitcase are all upwind accessories, which were easy to produce unstability, especially under the conditions of cross-wind or interlacing with oversize vehicles. In case the accessory was poorly installed or with poor design, which may endanger drving. In this case, selection and installation of accessories need to pay a special attention.

（5） Some kinds of accessories may lead to driver deviating from normal position, which limits not only his scope of activities but also operation ability.

（6） Extra electrical equipment may lead to overloading of original electrical system, in worse case may burnout wire harness or cut off power of running motorcycle which endanger personal safety.。

I.Safe driving of motorcycle

Regulation of Safe Driving

1.Check motorcycle before starting engine for avoiding damaged parts and preventing accident.

2.Motorcycle driver mustn't drive before passing the examination and getting driver's license from Traffic Management Department, lend motorcycle to person without driver's license is not allowed.

3.For avoiding injury, give your whole attention to drving when operating the motorcycle, in this case, please pay attention to:

★Too close to other motor vehicle is not allowed.

★Competition for road is not allowed.

4.Strictly adhere to local traffic regulations.

★Overspeeding produced many accidents, in this case, speed exceeded permission scope is not allowed.

★Turn on turning signal lamp when changing lanes for drawing attention from other drivers.

5.Pay a special attention to driving when at the crossroads, doorway of parking lot, or driveway.

6.Left hand firmly grasp on left grip, right hand on right one, and feet step on footrests when it is in running.

7.Luggage rack is mainly for light goods and should be firmly fixed for avoiding moving when it is in running.

8.Shift neutral gear to 1st gear under high speed is not allowed.

Protective device

1.For ensuring your personal security, wear protection equipment such as safety helmet, face shield, dust spectacles, and gloves when it is during driving.

2.The muffler is with high temperature when at driving, in this case, boot or other wear could cover leg should be worn for avoiding scald.

3.No loosened wear is allowed, or it may grasp starting arm, footrests or wheels and endanger driver.

★Motorcycle Refit

Caution: Refit motorcycle or replace its original equipments are unable to ensure driving safety and illegal. User must show respect to regulations from Traffic management department. Our company undertake no responsibility to refitted motorcycle without authorization.

⚠ Warning:

1. Wiring or changes without authorization is not allowed.
2. When fuse is broken, replace by copper wire or fuse with other capacity is not allowed.
3. When parking at night, turn off the fuel switch.
4. Loading weight on luggage rack should be no more than 5 kg.
5. Qualification certificate should avoid moisture and without folding.

Our company undertake no responsibility of motorcycle burnout or other quality problems due to cases above.

Checks before driving

Carefully check motorcycle according to right table before driving

Checking items	Contents
Handle bar	Flexible turning, no clearance and looseness
Brake	Brake lever and brake pedal should have correct clearance, and brake lamp should light on when it is at braking
Fuel storage	Enough for the traveling plan
Gear box	Check oil level, and supplement if needed
Throttle	Greaser grip and throttle cable should have suitable clearance with smooth acceleration and sharp turning off
Clutch	Cables with suitable clearance and no stagnation
Tyres	Correct air pressure, no crack and wound
Transmission chain	Suitable tightness and with proper lubrication oil
Illumination and horn	Check the performance of illumination system and horn
Oil	Check the oil gauge of engine and confirm the correct oil position

Essentials for driving

⚠ Warning:

1.In case this is your initial driving of this model, we suggest you find a road of nonpublic use, until you know well the control and operation.

2.Driving with single hand is dangerous, firmly hold the motorcycle by hands, and feet step on footrests. Under any conditions, drving without hands is not allowed.

3.No shifting to lower gear or decelerate at turning is allowed, decrease speed to safe level before turning.

4.Tyres are with low frictional force when driving on wet and smooth road, which may decrease braking and turning ability of motorcycle, in this case, decelerate in advance.

5.Crosswind usually occurs at the exit of tunnel, keep careful and calm when get through valley or overtaking the oversize vehicles, and then, decelerate.

6.Show respect to traffic regulation and limit your speed

II.Main technological parameter

Model	Data	Model	Data
Length	1945mm	Braking deceleration	Follow GB20073
Width	800mm	Max.gradeability	≥40°
Height	1095mm	Bore×Stroke	71×63
Wheelbase	1332mm	Compression ratio	9.7:1
Curb weight	148kg	Max.net power/Rotational speed	18kw/7500r/min
Carrying capacity	150kg(Including driver)	Max.torque/Rotational speed	23N.m/6000r/min
Max.allowed weight	298kg	Rotational speed under idling status	(1500±100)r/min
Load of Fr.Axle	99kg	Working volume of cylinder	249.4ml
Load of Rr.Axle	199kg	Spark plug	LMAR8J-9E
Size of front tyre	100/80-17	Clearance of spark plug	0.8~0.9mm
Size of rear tyre	130/70-17	Valve clearance	Air inlet valve：(0.07~0.13)mm
Max.designed speed	120km/h		Air outlet valve：(0.12~0.18)mm

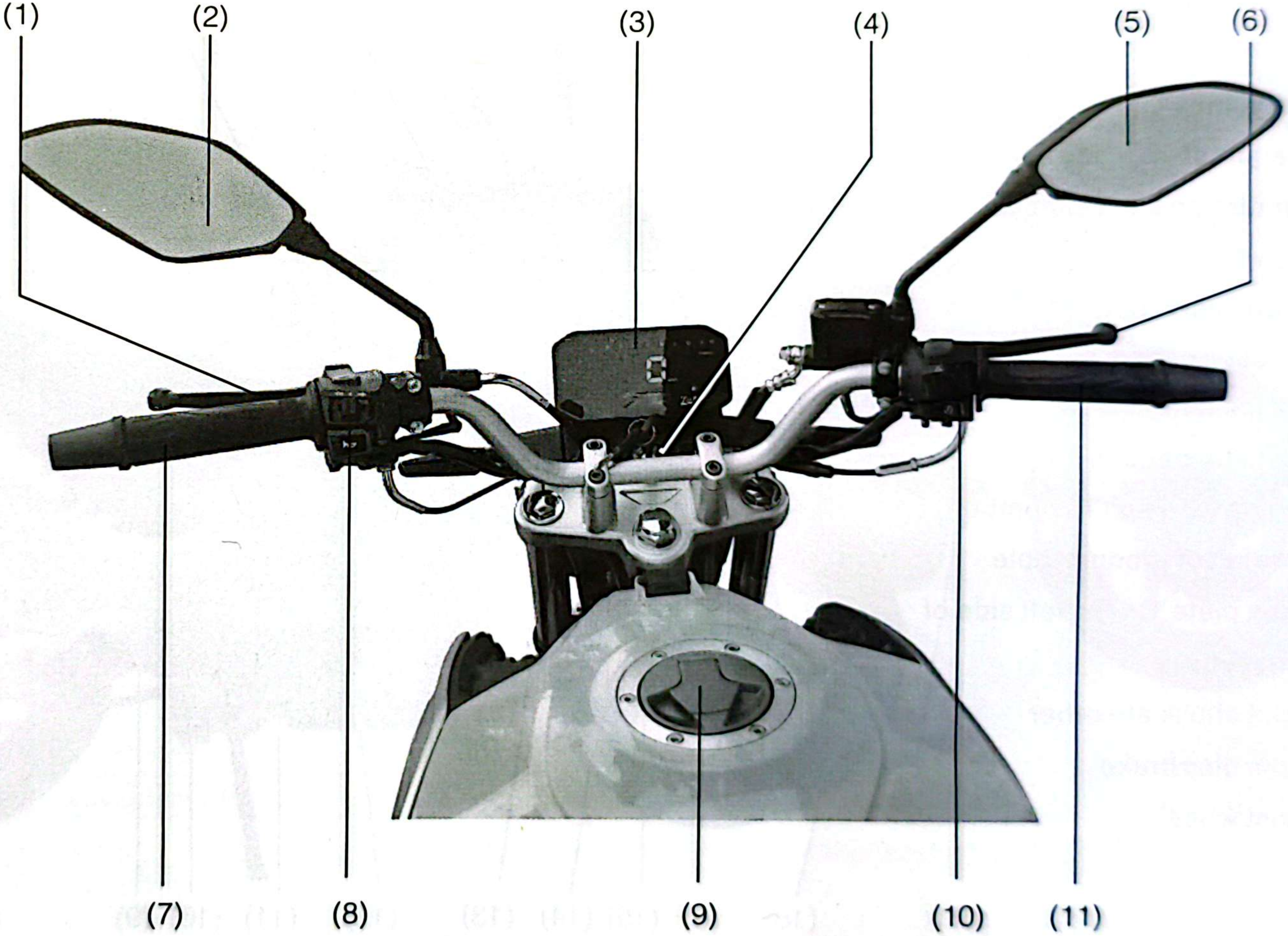
Main parameters(Additional)

Model	Data	Model	Data
Fuel consumption	≤2.9L/100km	Chip-shaped fuse	15A/15A
Capacity of lubrication oil	1.6L	Headlight	12V 15W/6.8W
Capacity of gasoline	14.5L	Tail light/Brake light	12V 6.5W
Speed ratio of gear box		Front position light	12V 2W
1st gear	2.864	Front turning signal lamp	12V–3.4W(LED)
2nd gear	1.778	Rear position lamp	12V 0.96W
3rd gear	1.273	Battery	12V 7Ah
4th gear	1.083	Rear turning signal lamp	12V–3.4W(LED)
5th gear	0.962	Ignition mode	CDI electrical ignition
6th gear	0.852	License plate light	12V-0.14W(LED)
Terminal transmission ratio	3.231		
Primary transmission ratio	2.864		

III.Structure of motorcycle

Name of each part(head)

(1)Clutch lever
(2)Left back-view mirror
(3)Meter
(4)Power switch
(5)Right back-view mirror
(6)Front brake lever
(7)Left hand grip
(8)Left switch assy
(9)Fuel tank lock
(10)Right switch assy
(11)Throttle grip



Name of each part(Body 1st)

(1)Head light

(2)Back-view mirror

(3)USB

(4)Oil switch

(5)left armrest

(6)Rear turning signal lamp

(7)Rear wheel

(8)Left auxiliary footrest

(9)Rear shock absorber

(10)Left main footrest

(11)Gearshift pedal

(12)Engine type and ID number

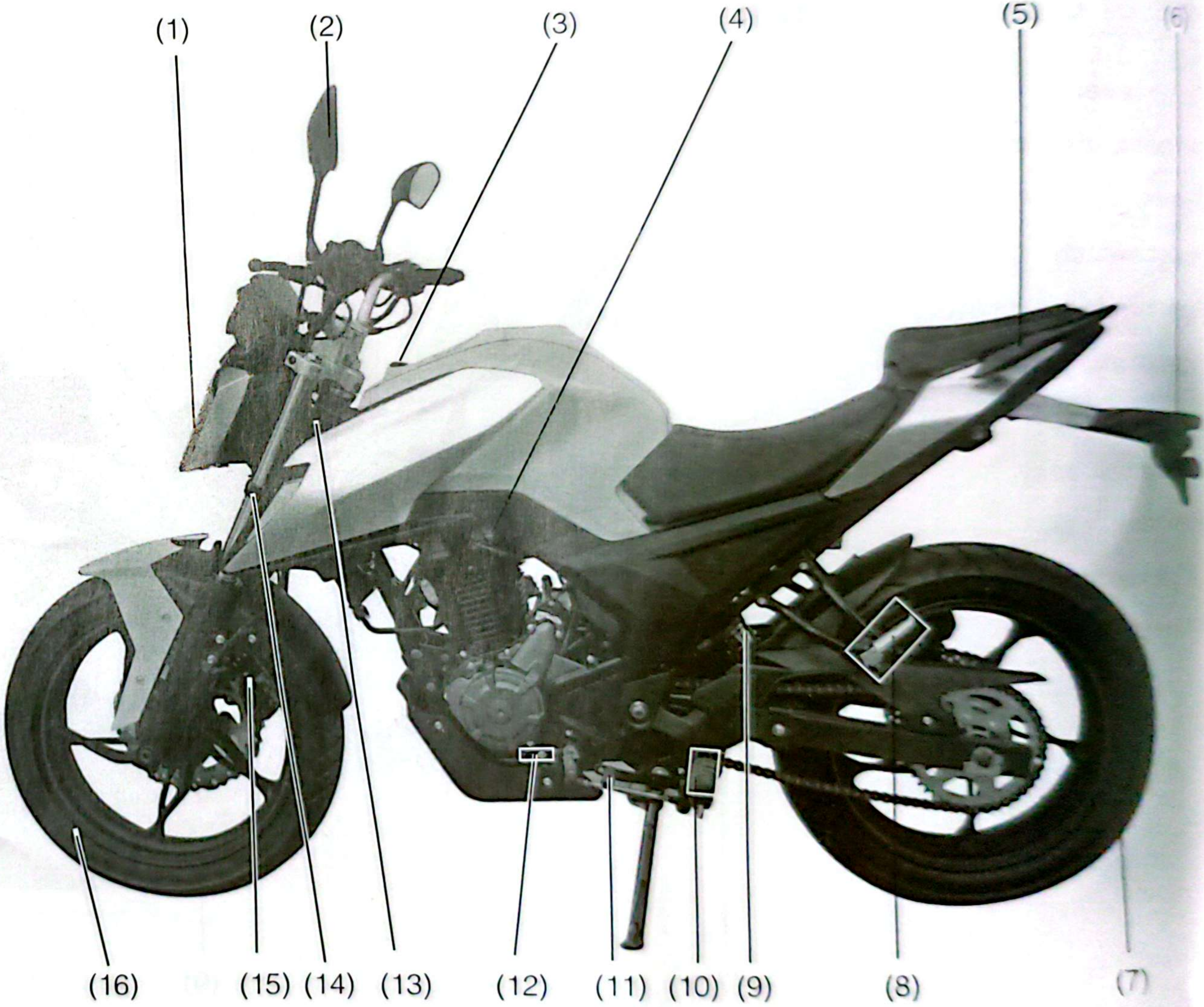
(13)Position of product lable

(Name plate,On the left side of Standing tube)

(14)Front shock absorber

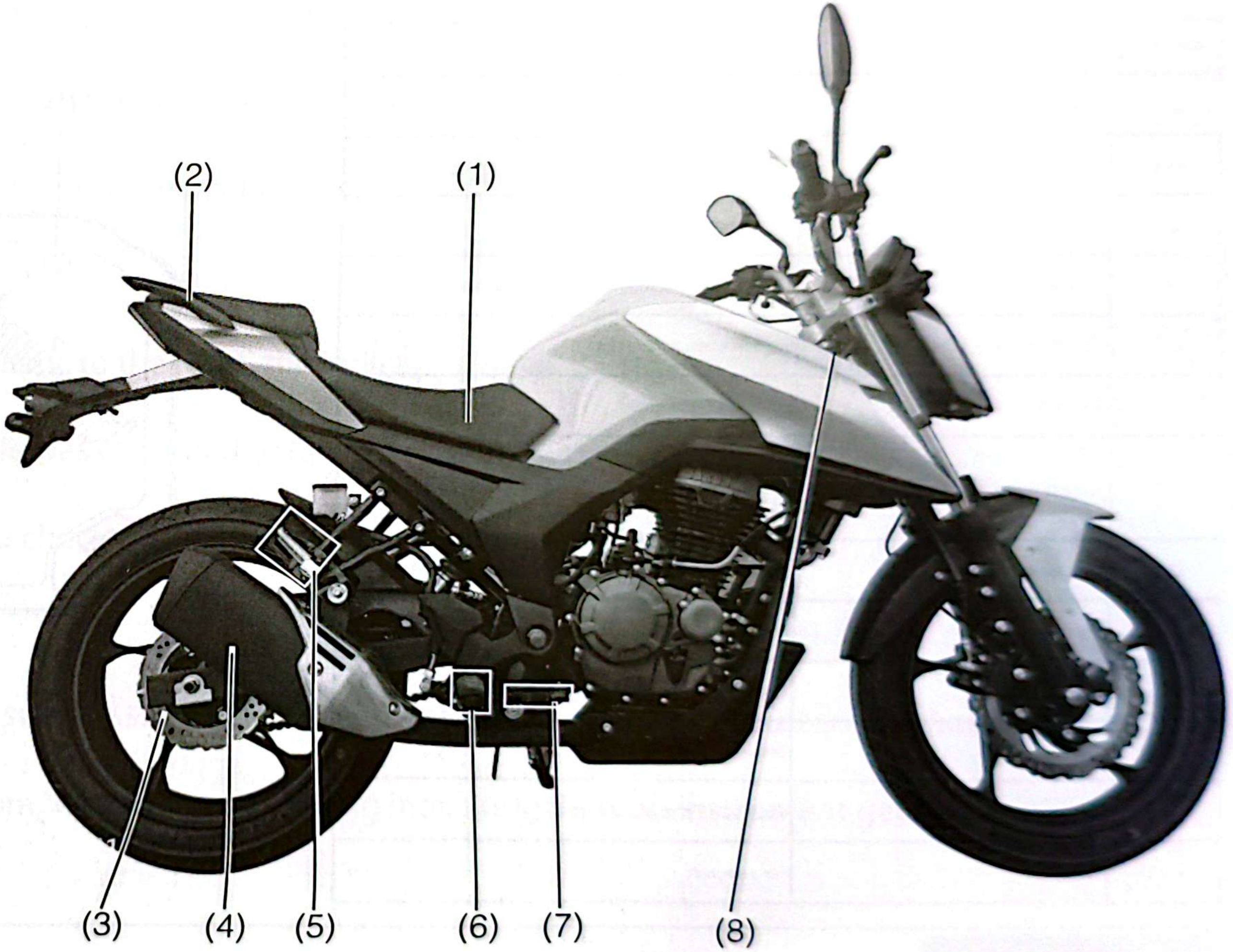
(15)Front disc brake

(16)Front wheel



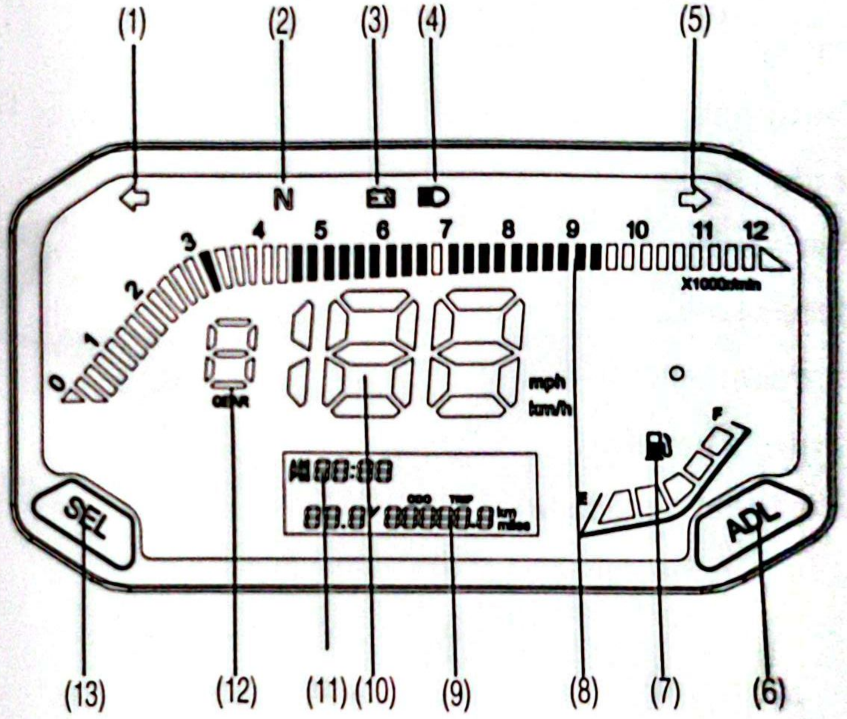
Name of each part(Body 2nd)

(1)Seat assy
(2)right armrest
(3)Rear disc brake
(4)Muffler assy
(5)right footrest
(6)Right main footrest
(7)Rear brake pedal
(8)Vehicle Identification Number(VIN)
Position(On the right side of Standing tube)



Meter indication lamp

Ref. No.	Parts name	Note
(1)	Indicator for left turning signal light	Flashes when turning left
(2)	Neutral gear indicating light	This light gets on when in neutral gear
(3)	Indicating light for battery voltage	Alarm for the low voltage
(4)	High beam indicating light	This light gets on when high beam opened
(5)	Indicator for right turning signal light	Flashes when turning right
(6)	Button ADL	For function adjustment
(7)	Fuel indicating light	When the cells are full, indicates you the fuel is full, in case the cell in red zone, which means now you need fuel filling-up.
(8)	Tachometer	Indicate you the engine rotational speed (r/min)
(9)	Odometer	Show you the mileage of motorcycle
(10)	Speedometer	Show you the speed by km/h
(11)	Clock	Show you the time
(12)	Gear indicator	Show you the gear position
(13)	Button SEL	For selection



⚠ Warning:

Form a habit of turning on signal lamp before lane shifting or make turning, and turn off the lamp after finishing lane-shift or turning.

1.Indicator for left turning signal light“⇦ ”:

When pushing the turning switch on left switch assy. to the left, the indicating light “ ⇦”on instrument gets on.

Note:When the turning signal light on motorcycle was damaged or failed to be on by other causes, the light“ ⇦”on instrument flashes more frequent, which remind you to check the malfunction in your turning signal light.

2.Indicator for right turning signal light“⇨ ”:

When pushing the turning switch on left switch assy. to the right, the indicating light“ ⇨ ”on instrument gets on.

Note:When the turning signal light on motorcycle was damaged or failed to be on by other causes, the light“⇨ ”on instrument flashes more frequent, which remind you to check the malfunction in your turning signal light.

3.Indicating light on instrument for high beam:

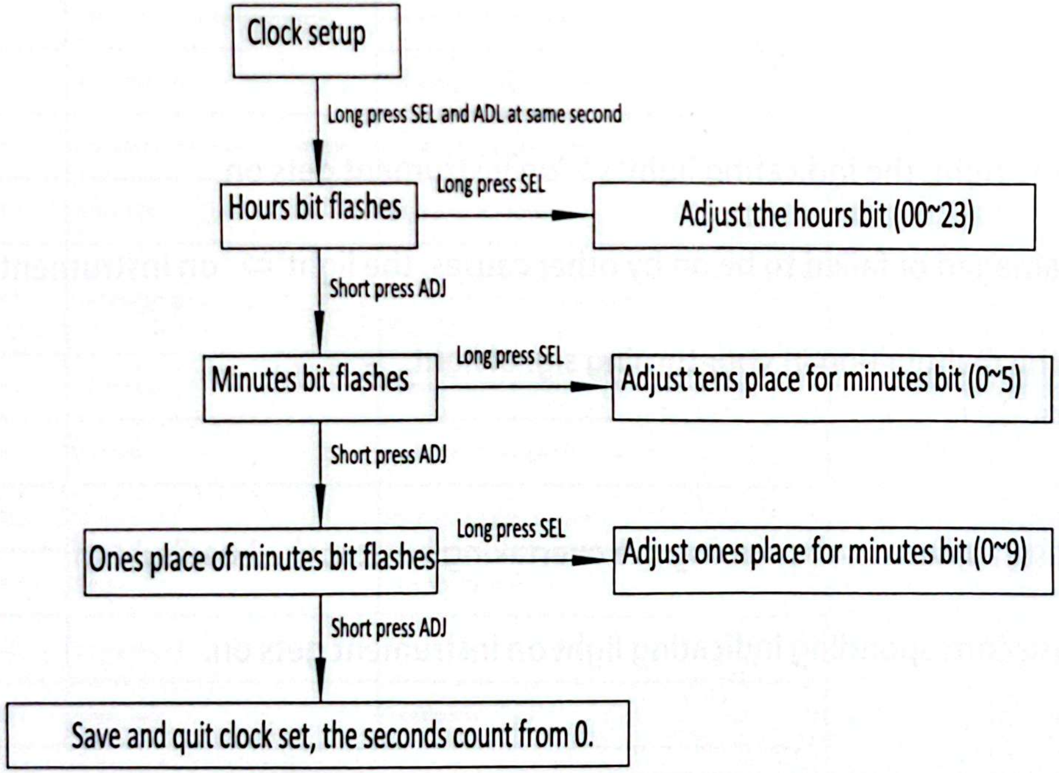
When pushing the high/low beam switch on left switch assy. upwards, or pressing the overtaking button, the headlight of motorcycle gets from low beam to high beam, whose corresponding indicating light on instrument gets on.

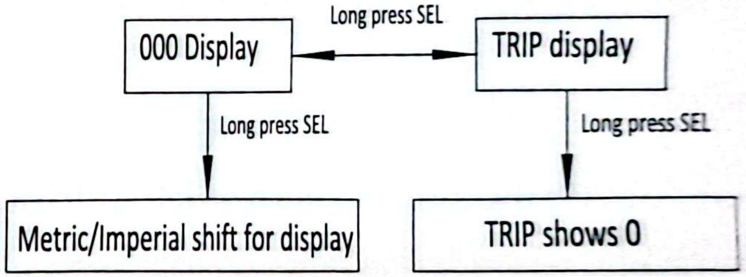
4.Indicating light on instrument for fuel:

When the fuel in motorcycle is lower than required, the indicating light for fuel gets on.

Note:Overfilling is not allowed, to avoid leakage from the Drive.

Operation procedure for buttons Judge for pressing time on button：Short press<1 Second；Long press≥3 Seconds

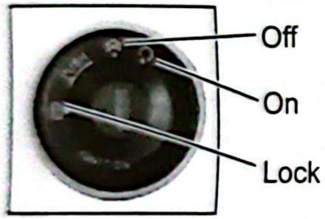

Clock setup
Long press SEL and ADL at same second
Hours bit flashes
Long press SEL
Adjust the hours bit (00~23)
Short press ADJ
Minutes bit flashes
Long press SEL
Adjust tens place for minutes bit (0~5)
Short press ADJ
Ones place of minutes bit flashes
Long press SEL
Adjust ones place for minutes bit (0~9)
Short press ADJ
Save and quit clock set, the seconds count from 0.


000 Display
Long press SEL
TRIP display
Long press SEL
Long press SEL
Metric/Imperial shift for display
TRIP shows 0

IV.Operation

Power source switch

Position	Usage
Off	For parking(All power off)
On	For starting or driving(power on)
Lock	For locking steering stem



⚠ Warning:

When steering lock is locked, pushing motorcycle is not allowed, or it may lead to imbalance.

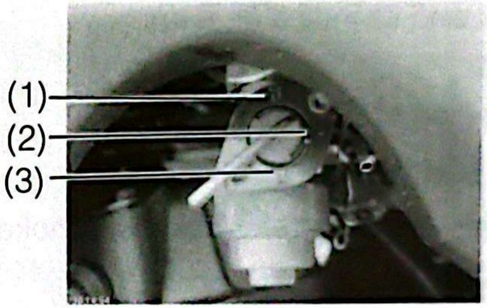
Fuel switch

1.Fuel adding

Fuel tank capacity please refer to main parameter.When adding, support by side stand first, and then open the fuel cap.

Caution: Please add lead-free or low-lead gasoline above 90#

2.oil valve use (fuel tank switch)



(1) Ʊ (ON)
(2) O (OFF)
(3) Ʉ Sub fuel tank switch

Position	Usage	Note
Ʊ	Fuel line is connected	Fuel supplying
O	Fuel line is cut off	Fuel cut off
Ʉ	Sub fuel tank	Open the sub fuel tank

Caution:

Fuel switch lever usually put on the position "On" may lead to overloading fuel supplement in carburetor, worse even flow into engine. In this case, the engine may be seriously damaged.

Engine starting

1.Put ignition key on position of "↻".

2.Put emergency switch on position of "↻".

3.Confirm neutral gear and its indicator is on.

4.Confirm fuel amount.

5. Fuel valve is on position of "Ʊ".

★Engine's cold starting:

1.Draw up choke lever on carburetor(Turn off choke lever).

2.Turn 1/8～1/4 round of accelerator.

3.Start by electricity or foot.

4.Slightly turn greaser grip, speed up engine rotation for heating.

5.Turn down choke lever when engine completely heated,totally open choke valve.

★Caution:

No starting allowed before neutral gear confirmed, or may lead to accident. Idle running is unnecessary and bad for engine(especially in high speed).

★Engine turning off

1. Relax greaser grip, and slow down the engine.
2. Put on neutral position.
3. Lay ignition switch on position OFF
4. Fuel valve (Fuel tank switch) is on position"O".

Engine running-in

The first 1000km is the running-in period.

In running-in period, please pay attention to these issues below:

1. No heavy load and steep slope is allowed. continuous driving more than 50km is not allowed.

2.Pre-heating for 3～5 minutes before each starting for sufficient lubrication for moving parts.

3.No faster than 40km/h in the first 500km.is allowed, the second 500km mileage should be no more than 55km/h.

⚠ Warning:

No starting allowed in room with poor ventilation or without ventilators. Because the CO gas is a rank poison.
No leaving allowed when engine is under working status.

Right switch assy

(Electrical and non-electrical starting is with tiny difference)

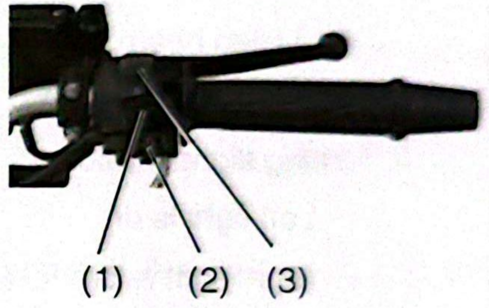
1. Headlight switch

Headlight switch has 2 positions, they are “ △ ” and “ • ” (White point).

“ △ ” : Emergency light on

“ . ” : Headlight keeps on

● Caution: Head and tail light won't be on before motorcycle starting.



(1)Headlight switch
(2)Electrical button
(3)Emergency switch

2. Electrical starting button (Only on electrical starting motorcycle)

Electrical starting button is under the headlight switch,when emegency switch is on“↻”, and engine is on neutral gear, press this button, and the engine will be started.

3.Emergency switch

When engine is starting, emergency switch usually put on “ ↻ ”.Under emergency situation, put the switch on“⊗”, directly cut down power and the engine is off.

⚠ Warning:

Under continuous starting of engine, each starting could not be more the 5 seconds, because large scale of discharges may make engine abnormally hot. In case failed starting after several times, check fuel supplying and starting circuit.

Left switch assy

1.Dimmer switch，Headlight

≡◗ High beam

⫽◗ Low beam

2.Turning signal switch

← Left light is on

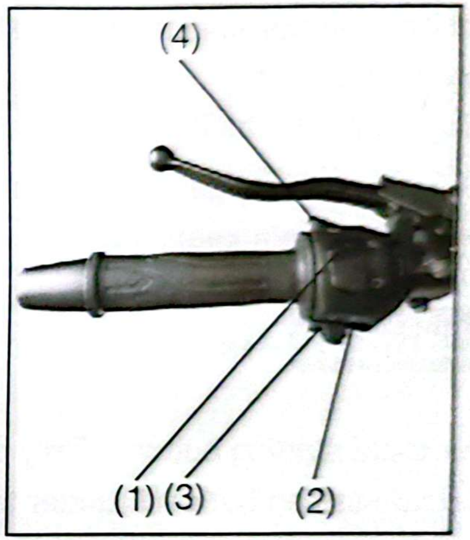
→ Right light is on

3.Horn switch

Press this button, the horn is ring

4.Overtaking switch

Turn it on while overtaking.



(1)Dimmer switch

(2)Turning switch

(3)Horn switch

(4)Overtaking switch

⚠ Warning:

Form a habit of turning on signal lamp before lane shifting or make turning, and turn off the lamp after finishing lane-shift or turning.

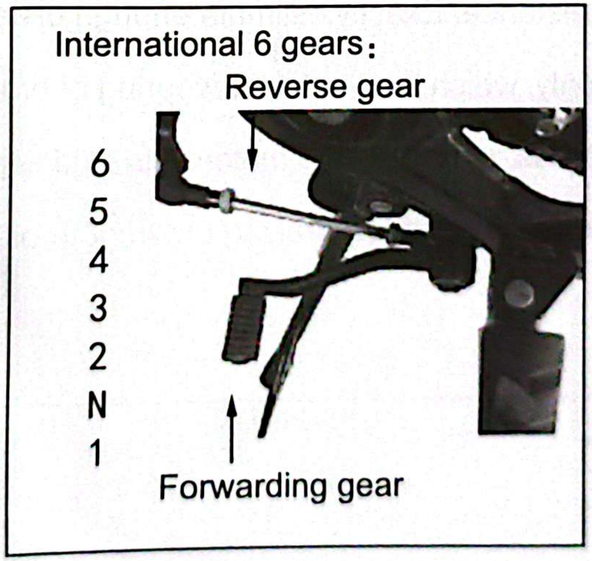
Method of gear-shifting

Pre-heat engine for ensuring its normal working.

1.When engine is in idling speed, please release clutch(tightly hold clutch lever), step on gearshift pedal, make speed transmission enter the low speed (The 1st) gear;

2.Accelerate engine and slowly release clutch lever coordinately for ensuring natural starting.

3.When got balance driving, decelerate engine and release, draw up gearshift pedal for entering the 2nd gear, and this method could be applied for other gear's shifting.


International 6 gears:
Reverse gear
6
5
4
3
2
N
1
Forwarding gear

V.Matters need pay attention during driving

1.Avoid idling rotation, especially in high speed, or the engine may be damaged.

2.Clutch working in semi-separation status may wear out friction plates.

3. In case feel insufficient power during climbing, change to low speed gear.

4. Use front brake only or coasts in neutral is not allowed when during declining or high speed.

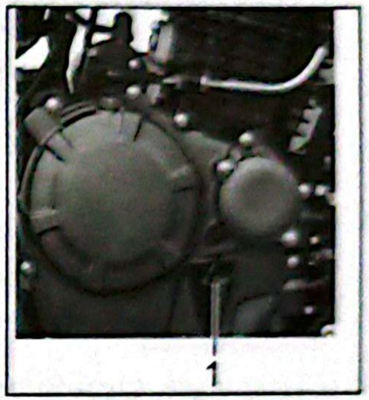
5. Turn down accelerator, meanwhile cut off clutch, and then brake.

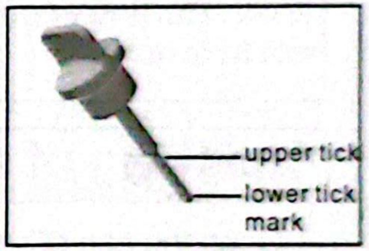
⚠ Warning:

1. High speed corresponds long braking distance. Exactly estimate enough distance for ensuring braking.
2. Inexperienced person use rear brake only, which lead to faster wearing of brake system and longer braking distance.
3. Singly use front or rear brake is dangerous, which lead to motorcycle skidding or out of control. On wet, smooth road or turning place, carefully and slightly use brake system. Sudden braking on smooth or rough road may lead to motorcycle out of control.

VI.Checking, adjustment and maintenance

Machine Oil checking





.Check and fill up the oil in engine are both on the right engine case as right picture shows.

.The way for checking oil level.

-The engine is under cold condition.

-Keep the motorcycle upright.

-Remove the oil gauge 1 to check oil level.

-The correct level shall be between the Upper and Lower scale lines.

.In case the level is higher than the upper scale line, please drain some oil out.

.In case the level is lower than the lower scale line, please fill up some more.

.No matter the drainage or filling-up, check the oil level once again according to steps above.

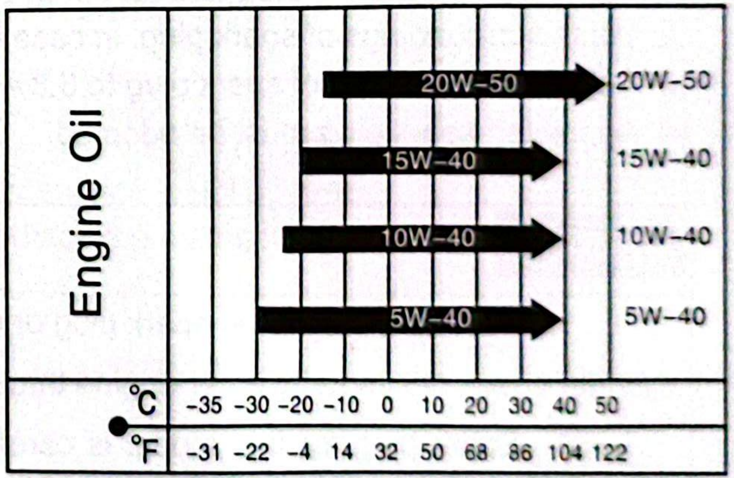
Replacement of machine oil

Screw off oil drainage bolt and drain off oil when engine is hot.

Wash filtering screen of oil filter, well installed after washing, and then pour 1.6Ln new oil, start engine and idly rotate for 2~3 minutes.

Confirm the oil level is within upper and lower scale line after engine stopped for 1~2minutes, make sure the motorcycle is uprighting.

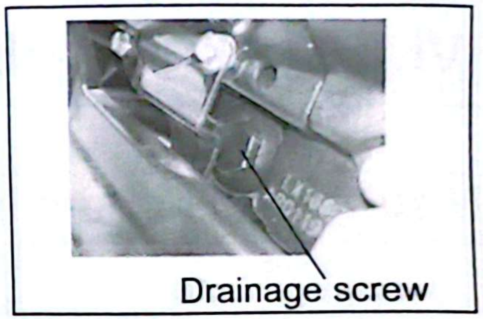
Mixed using of types of oil with grades is not allowed for avoiding mechanical failure.



If you need to use them in winter, please exchange 5W-40 or 0W- 40 low temperature resi stant oil and you need to exchange 10W- 40 or 20W-50 oil again in Summer

Cleaning of Machine Oil Tank

1.Drain off all the oil.
2.Break down each part.
3.Wash each part.
4.Pouring in appointed oil.

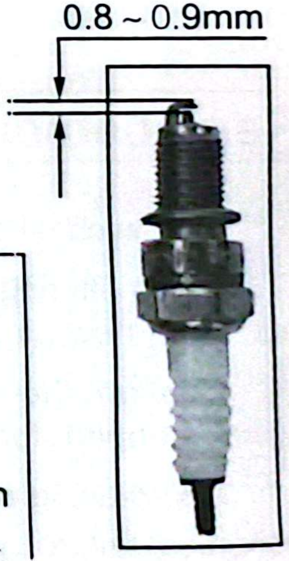


Caution:

This work should be done by professional staff in appointed service station. Oil gauge indicates oil level, starting engine is not allowed when oil is insufficient, oil adding surpass upper scale line is not allowed.

Checking of spark plug

1 Open the cap of spark plug and screw off spark plug by its spanner.
2. Wash surroundings of spark plug, in case it is corroded or with too much precipitate, please replace.
3. Adjust the clearance of spark plug to 0.8 ~ 0.9mm.
4 Appointed spark plug must be adopted.



Caution:

1.Screw up too tight the spark plug or wrong threaded is not allowed for avoiding damage thread on cylinder cover. No impurity enter engine through spark plug hole is allowed when breaking down.

2. Spark plug for this model is carefully selected which suits most of the working circumstance, in case other spark plug with different thermal resistance need be used, dicuss with Loncin distributor first, because unsuitable spark plug may seriously damage engine.

Checking and replacement of air filter

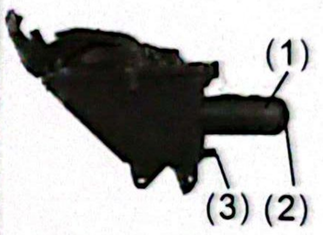
Special used air filter has not only waste nozzle and air supplement nozzle, but also improves air flow and filtering efficiency.

Air inlet nozzle connects secondary air supplement tube which supplies fresh air, waste nozzle connects crankcase, make waste gas from crankcase enter combustion chamber for re-combusting and avoiding direct enry to atmosphere.

Take out air filter for checking dirt.

(Break down)Remove air filter cover, screw off bolt, and break down air filter.

Caution Correctly install air filter element or the entry of impurity in engine may shorten the life of engine.No water entry in air filter is allowed.No gasoline or cleaner with low fire point for element washing is allowed.



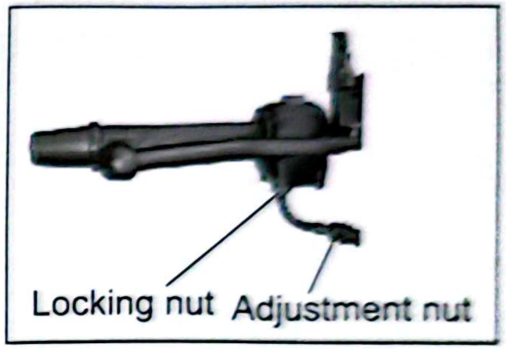
(1)Air inlet nozzle
(2)Clip
(3)Waste nozzle

Caution:

1.Driving in dusty conditions, usual washing is needed, wait for periodic maintenance is not allowed.
2.Check crack on element before or at washing, in case crack was found, replace the element.

Adjustment of throttle cable

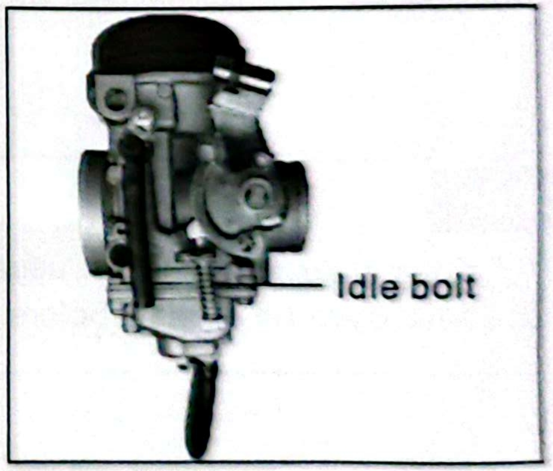
1. Confirm the normal work of adjustment nut for throttle cable.
2. Confirm the free travel of throttle turning grip during normal range.
3. Stipulated free travel: 2 ~ 6mm， in case not, adjust by its nut.



Warning:

After throttle cable is adjusted， check turning performance of grip. No higher engine idling speed dueto adjustment is allowed, meanwhile, grip should turn off automatically .

Adjustment of carburetor



1. Carburetor for models passed StateIII standard was carefully adjusted.
2. Idling adjustment of engine should be under hot status.
3. Lay the motorcycle on flat ground, and adjust by idling screw.Idling speed： 1500±150r/min

Warning:

Engine's idling adjustment should be under the situation of sufficient pre-heating.

Checking and adjustment of valves clearance

Check

Note:Please check and adjust valve clearance under cold condition (Lower than 35℃)

Please remove the parts below:

—Cylinder head cover

—Left decorative cover and o-ring

—View cap hole and o-ring

Assembly situation: Turn the crankshaft by socket wrench in size 14mm anticlockwise, to make sure the scale mark T[1] on magnetic cylinder in the sight of bolt's hole on view cap, then align with the gap[2] on

Meanwhile making sure the timing mark "—" on sprocket wheel get aligned with the surface of cylinder head and the mark of round point face upwards as picture shows, in case not under this situation, please turn the crankshaft once again for 180°.

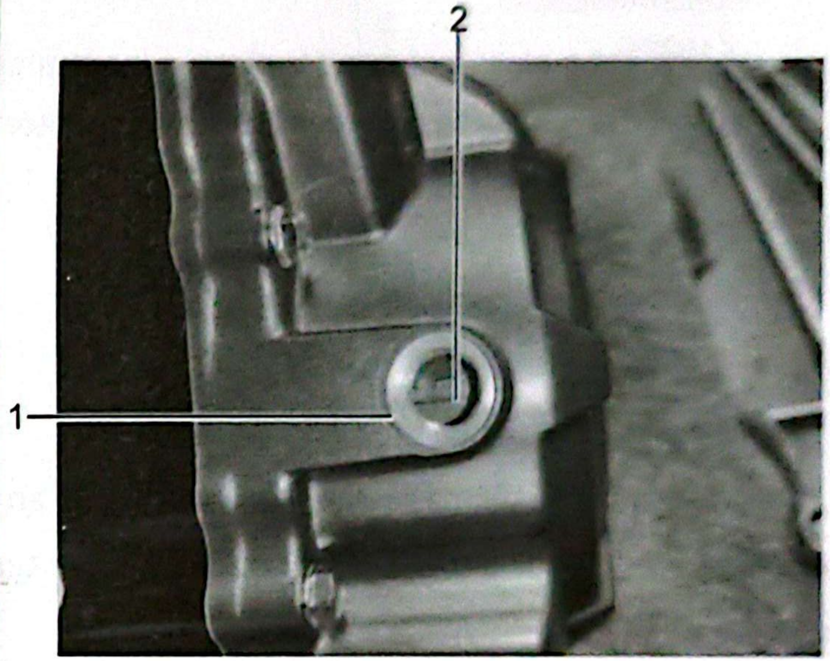
Valve clearance:

IN:0.07-0.13mm

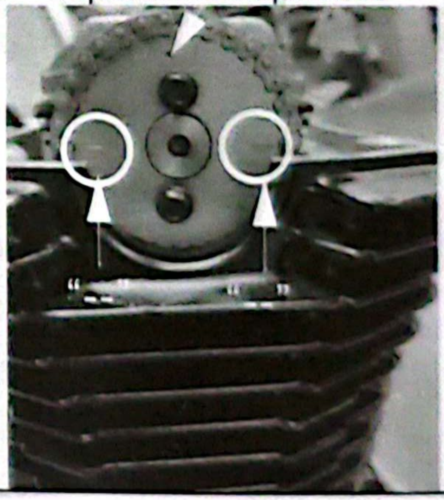
EX:0.12-0.18mm

Note:

Mark up each valve clearance as reference for easy selection on corresponding shim.



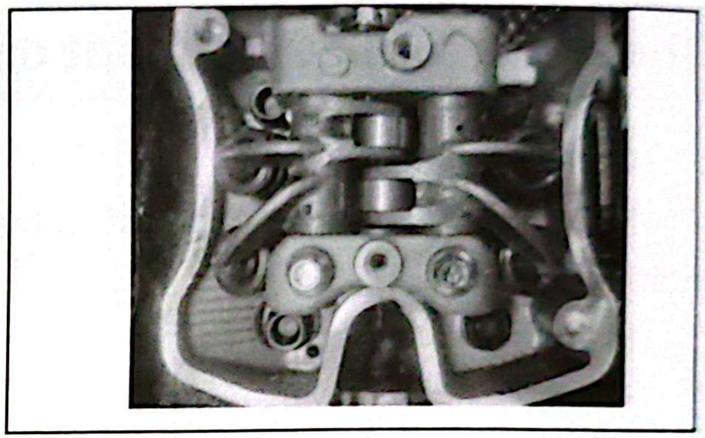
The mark of round point face upwards



AdjustmentNote

lAdjust valve clearance need to remove the swinging arm.

Adjust the engine to timing condition as chapter above show



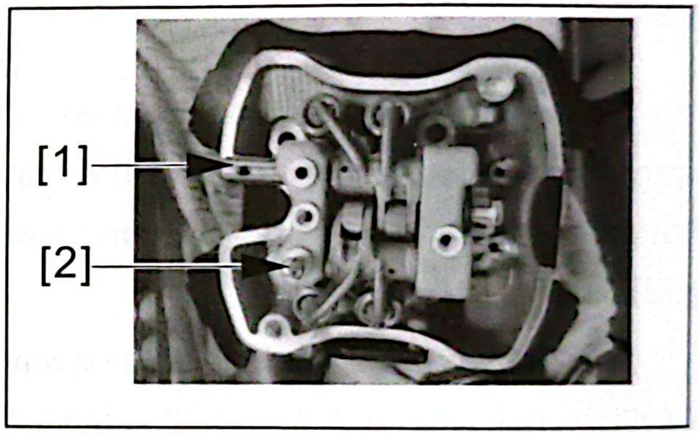
Remove the parts below:

— Valve swinging arm screw [1]

— Valve swinging arm shaft [2]

Note:

To avoid the damage on valve swinging arm shaft, please confirm the engine is under timing condition, then turn the swinging arm shaft in then slightly take out.



Operate as below:

— Move the valve swinging arm [3] **outwards**

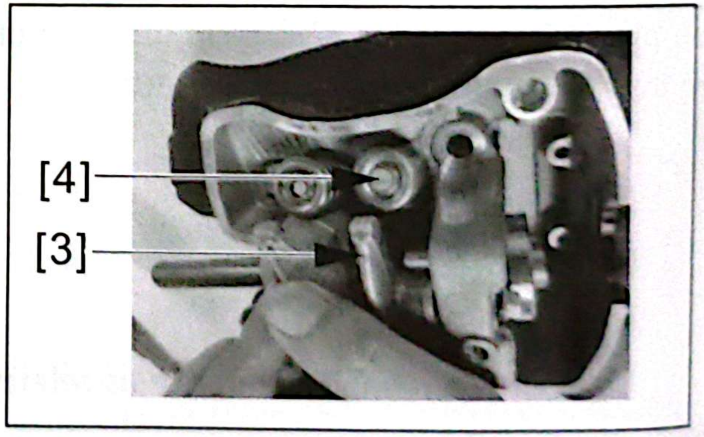
— Remove the shim [4] **by iron sucker.**

Note:

Don't let shim drop into crankshaft case and hole for spark plug

l Mark up all the shims for correct re-assembly.

Remove shim by tweezers or magnet will be easier.



Measure the thickness of shim[1] and take record

Note:

IThere are shims with 69 different thickness for selection with adjoining difference for thickness shall be 0.025mm(1.200-2.900mm)

Calculate the thickness for new shim by equality below:

A=(B-C)+D

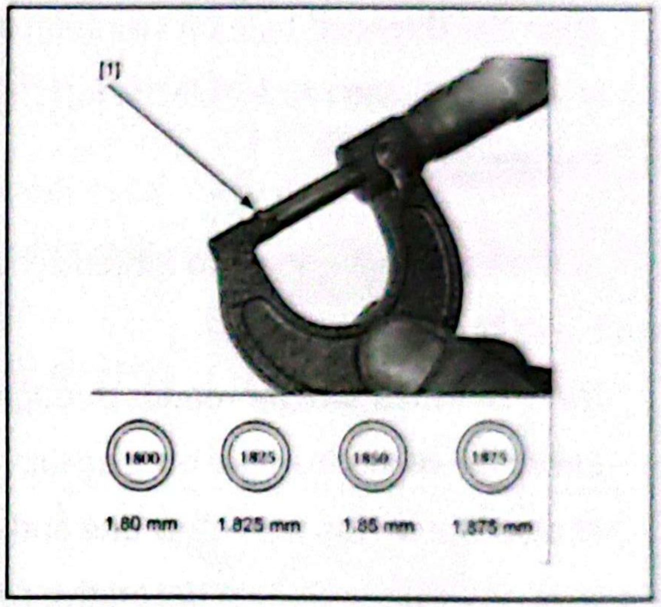
A:Thickness for new shim

B:Take record for valve clearance

C:The required valve clearance

D:Thickness for removed old shim

IMeasure by micrometer to make sure the thickness for new shim.

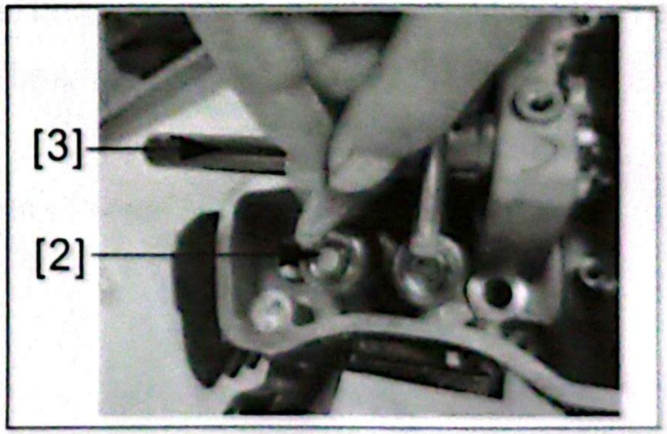


Coat the end of valve rod with oil.

Assemble a new shim [2] to valve spring's base.

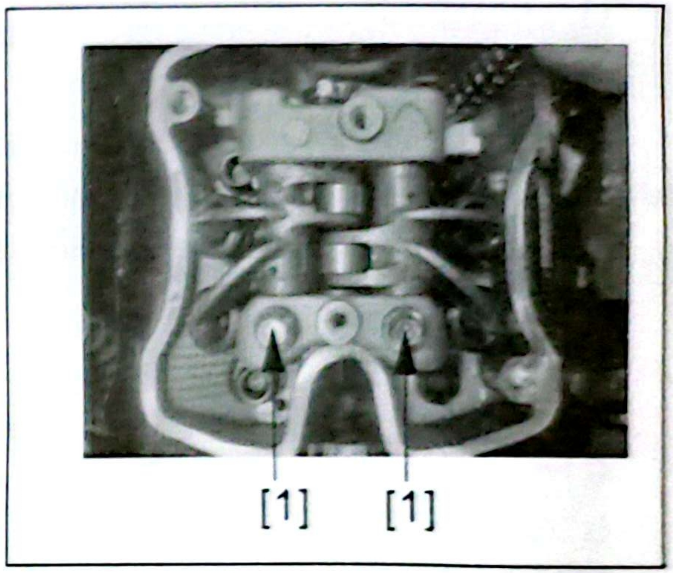
Spread oil to sliding area of swinging arm, surface of thrust and outer surface of swinging arm's shaft.

Fix the swinging arm according to its original position, then insert its shaft[3] to cylinder head and swinging arm itself.



Align the threaded hole on swinging arm's shaft to the through hole on the bracket of cam, then assemble the fastening bolt[1] of swinging arm's shaft.

Torque:7N • m



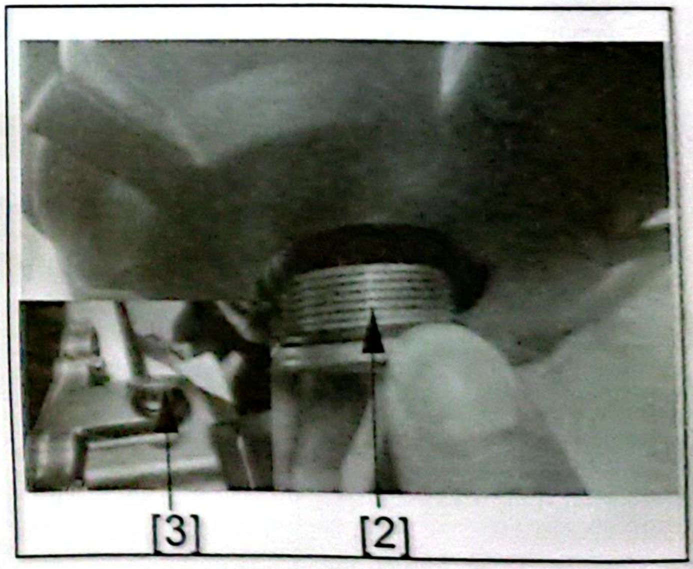
Release the single sheet to let tensioner recover its normal tension, then assemble its bolt and seal ring.

Make camshaft turn for rounds through turning crankshaft clockwise.

Check the valve clearance once again.

Replace the o-ring for a new one and coat it with oil, then install it into the groove on view cap and left decorative cover.

Spread lubricant on the thread of view hole cap and left decorative cover and re-assemble the view hole cap hole and left decorative cover.



Screw up the view cap hole to required torque.

Torque:5N • m

Screw up the left decorative cover to required torque.

Torque:12N • m

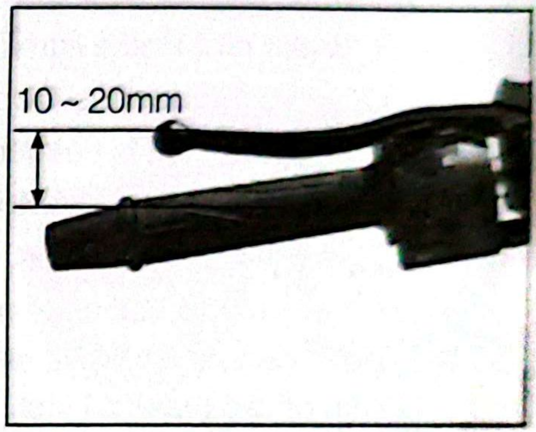
Adjustment of clutch

★Clutch could not be adjusted before engine stopped.

Free distance of the end of clutch lever is within 10 ~ 20mm. In case adjustment is needed, Loosen the fastening nut on clutch operation line， and adjust free distance to stipulated range.

In case adjustment scope need to be extended, adjust the stud on right crankcase.

★Start engine after adjustment, confirm the normal work of clutch. In case clutch skidding or hard in gearshifting, re-adjustment is needed.



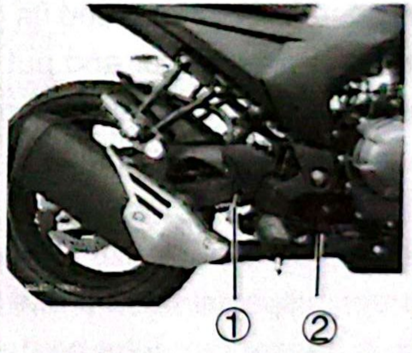
Adjustment of brake pedal

★Well support the motorcycle by side stand when checking the disc brake

1.Free moving distance of rear brake pedal should be within 15~25mm.

2.After adjustment, lock the adjustment nut.

Caution: After adjustment, when checking brake assy., brake light should be on.



① Limit bolt

② Rear pedal

Parking rack

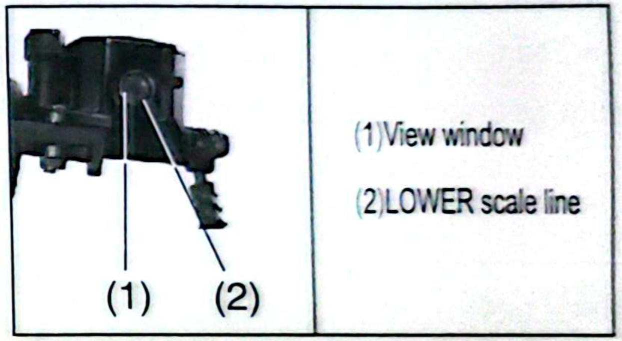
This model equipped side stand only.

①Side stand

Repair and maintenance of Fr.&Rr.Disc brake

1. Brake oil (Brake liquid)

Observe if oil level is lower than scake line “LOWER” (2) through oil level view window (1). In case lower than this line, prompt oil supplement is needed, higher than the scale line by 3 ~ 5mm is the best, higher than the highest oil position line is not allowed. When oil level falling down and close to scale line (2), please check the abrasion of lining plate.In case the abrasion is within the limitation, check the leakage of brake system, and then consult local service station of our company.



2. Procedure for brake oil replacement

Drain off old brake oil first, and the steps are as below:

①Horizontally lay the master cylinder(no need remove from handle bar), and then open oil pool cap and its gasket;

②Remove brake caliper and put deflating valve to the lowest position;

③Screw off deflating valve and make fluid freely flow out;

④When brake liquid is unable to flow out, add new brake liquid by 30 ~ 50ml, and let old liquid drain off;

⑤Screw up deflating valve, wipe up liquid on caliper, and then install caliper on motorcycle.

Then add again special used brake liquid to oil cylinder, and steps are as below:

①Hitch a transparant tube on deflating valve (tightly matched), screw off valve by 120 degree;

②Add new brake liquid into master cylinder and drain off liquid from deflating valve(without moving lever) untill flowed out liquid without bubble, and then screw up the valve;

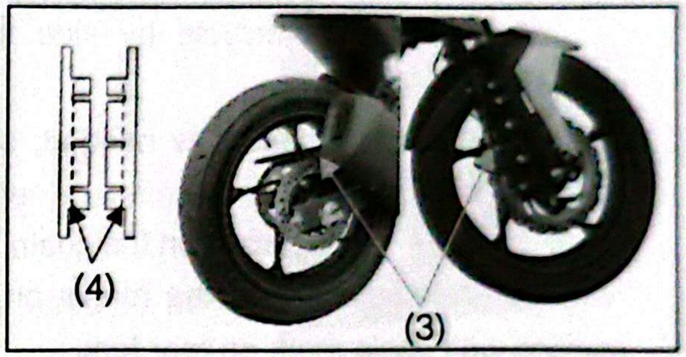
③Move lever, repeat step ②, untill with sound handfeel. Finally, well install oil pool . cap and its gasket, and screw up its screw.

Caution: 1. Please adopt authentic D0T3 or D0T4 special used brake liquid for replacement.
2. No types of liquid mixing is allowed. 3. No using of contaminated brake liquid is allowed.

⚠ Warning: Accidental drink of brake liquid or splash in eyes or on skin is harmful. In case drank, forced spitting is needed. In case splashed on skin or in eyes, wash by big amount of pure water.

3. Friction pad(Lining)

Abrasion could be observed by eyes directly during stipulated maintenance period. When checking, follow the direction of double arrow (3) In case the abrasion of any lining reached scale line (4) ,replace pads Both sides, leakage of brake liquid is not allowed, check if there is crack or distorsion on connective parts or brake liquid tube.



Caution: 1. Only our company original packed products from service station is allowed when replacement is needed. Any repair or maintenance for brake system please contact our local service station.

2. Immediate driving for new replaced braking pad is not allowed. Grasp several times of brake lever and step on rear brake pedal, make complete plying-up of braking pads and recover normal holding force, and then make stable circulation of brake liquid.

4. The steps of deflating for brake system are as below

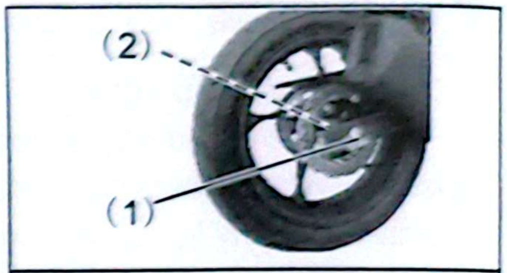
(1) Master cylinder deflating: Master cylinder installed on right side need turn front wheel left (on left turn oppositely) , open fuel tank cap and oil pool gasket, repeatedly operate front brake lever and observe untill without bubbling. In case the handfeel is still powerless, deflating for brake caliper;

(2) Caliper deflating: Hitch a transparant tube on deflating valve (tightly matched), tightly hold front brake lever, and screw off valve by 90 degree; flow out liquid for 1~2 seconds; Screw up deflating valve; release front brake lever, repeat steps above untill good handfeel estabilished.

Caution: When caliper is deflating, add brake liquid into master cylinder, mainten the level hight, 0.5 tiny hole of master cylinder (supplement hole) exposing in air is not allowed.

⚠ Warning: Disc brake system is with high pressure braking. For ensure safety, timely replacement of oil tube and brake oil is needed.

Adjustment on driving chain



(1)Rear wheel axle
(2)Adjustor (with scale mark)

★Check abrasion, tightness, and lubrication status of chain.

1. Support motorcycle by side stand, Prod chain up and down for checking the sag:Within 10 ~ 20mm。

2. When adjustment is needed, screw off rear axle nut and locking nut, make chain tightness meet demand.

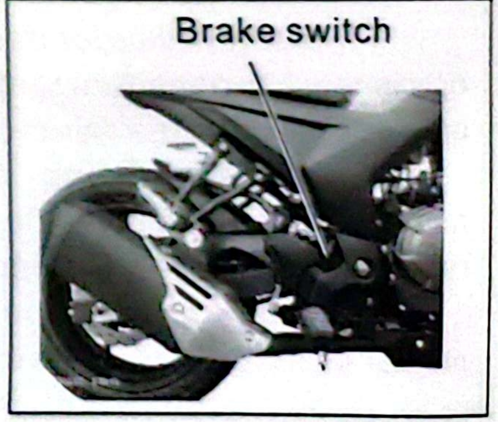
3. Add a few lubricant on the chain.

★ After adjustment, the marks on left and right chain adjustor should be at the same position with scale mark on rear fork.

⚠ Warning:

Excessive flexibility of chain may lead to accident and also damage the engine.
replacement is needed in case chain was corroded by electrolyte or other corrosive liquid.

Adjustment of brake switch



★After rear wheel braked, check the braking light, in case it is off, adjust the nut.

★Turn on the brake light switch. In case bulb is off, check braking light, circuit, and switch, replace if needed.

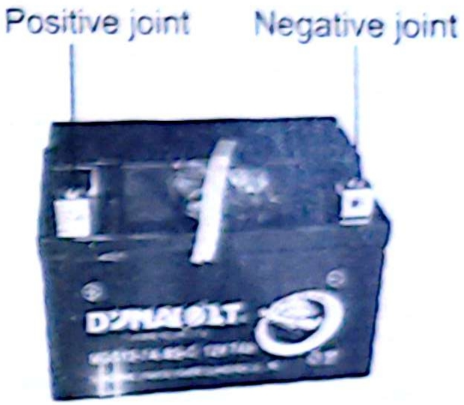
Caution: Before adjusting brake light switch, check free moving distance is within stipulated scope.

Checking of battery

1.Open the seat.

2.Clean up dust and corrosive impurity on the surface of battery.

3.Check joint of guiding line, in case corroded, please replace.



Caution:

(1)When breaking down battery,remove (-pole) first, and then (+pole) ;when installing, (+pole) first,and then (-pole) ,no touch (+pole) on motorcycle is allowed.

(2)Electrolyte replacement is not allowed once battery is in using,and battery need to be charged separately when power exhausted.

(3)Battery contains sulfuric acid,contact with eyes or skin may lead to serious injury,in case did,wash by pure water for 5 minutes and then send hospital.

(4)Impurity enter battery is not allowed when at installing or breaking.

(5) Make sure ventilation tube of battery is unobstructed.

Replacement of fuse

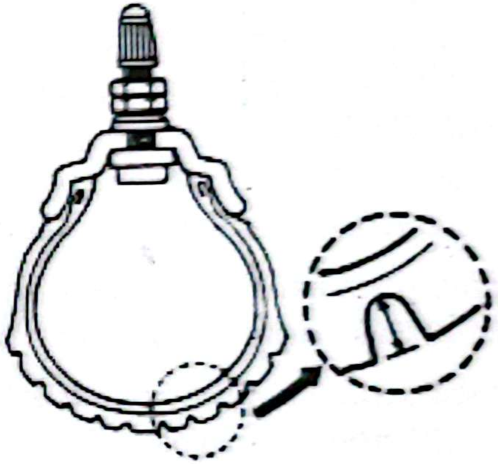
1. Iginition switch is on position of "OFF". The replacing fuse should be with specification of：(15A)
2. Open main seat, put fuse above of battery, alined, and then replace.
3. Immediate burnout after replacement indicates faults exist in other electrical equipment.

⚠ Warning:

No water washing battery is allowed. Fuse specification out of stipulation is not allowed, or it may seriously damage electrical system even burn out motorcycle and make engine lose power, which is angerous.

Tyres

Depth checking of tire tread in periodic maintenance is necessary. For ensuring safety and longest service life, besides periodic maintenance, usual checking is highly needed.



Air pressure in tyres

Insufficient pressure in tyre not only accelerate wear-out but also bad for steady driving. Poor air pressure makes hard turning; But high air pressure decreases grounding area which lead to skidding and makes motorcycle out of control. Keep tyre pressure within stipulated scope is a must.

Front tyre pressure :225kPa Rear tyre pressure:250kPa

Replacement of bulbs

Power rating of each bulb shows as table below.

Model	Data
Headlight	12V 15W/6.8W
Tail light/Brake light	12V 6.5W
Front position light	12V 2W
Front turning signal lamp	12V 3.4W(LED)
Rear position lamp	12V 0.96W

Specification table of torque for fastening parts

Ref.No.	Position	Torque(N.m)	Ref.No.	Position	Torque(N.m)
1	Hanging and fastening engine	M8X1.25: (20~32) M10 × 1.25: (45~58)	6	Connecting and fastening handle bar and steering stem	M6: (7~11) M8: (20~32)
2	Fastening front shock absorber	M8X1.25: (20~32) M14 × 1.5:(45~65)	7	Upper fastening of rear shock absorber	M12 × 1.25:(40~55)
3	Fastening front disc brake	M8X1.25: (20~32) M10 × 1.25: (34~45)	8	Lower fastening of rear shock absorber	M12 × 1.25: (40~55)
4	Fastening rear wheel axle	M14 × 1.5: (45~65)	9	Braking disc fastening	M8X1.25: (20~32)
5	Fastening steering stem	M22 × 1: (60~90) M25 × 1: (24~26)	10	Rear fork fastening	M14 × 1.5: (45~65)

Periodic table for Maintenance

Motorcycle should be repaired and maintained periodically refer to table below

Note 1. Driving in dusty region, usual washing is needed. 2. When mileage data surpassed the highest limit, repeat maintenance according to table below.

Periodic maintenance table

Items		Interval	Km x 1000						
			1	7	13	19	25	31	37
Power operation part	Lubricant		R	R	R	R	R	R	R
	Lubricant element		R	R	R	R	R	R	R
	Check the lubricant level		I	I	I	I	I	I	I
	Check the seal performance of fuel pipeline		I	I	I	I	I	I	I
	Check the fuel pump's element		\	\	I	\	I	\	I
	Fuel filter		I	I	I	I	I	I	I
	Check the seal performance for air inlet system		I	I	I	I	I	I	I
	Valve clearance		\	\	I	\	I	\	I
	Spark plug clearance	The spark plug needs to be replaced every 24000km	\	I	I	I	R	I	I
	Air filter element		I	C	R	C	R	C	R
	Throttle operation system/carburetor		A	A	A	A	A	A	R/C
	Timing chain		I	I	I	I	I	I	I
Lubrication part	Clutch operation system		A	A	A	A	A	R/I	A
	Check the lubrication of steering bearing and its tightness		I	\	L	I	L	I	L
	Check the lubrication for front & rear wheel and bearing of sprocket seat		\	L	L	L	L	L	L
	Check the lubrication for turning shaft of main and pillion footrest		\	L	L	L	L	L	L
	Check the lubrication for side stand shaft		\	L	L	L	L	L	L
	Check the lubrication for shaft of brake and clutch lever		\	L	L	L	L	L	L
	Check the lubrication for bearing of rear shock absorber's cradle		\	L	L	L	L	L	L
	Check the lubrication for bearing of rear fork shaft		\	L	L	L	L	L	L
	Check the lubrication for the chain		A	A	R	A	R	A	R
Others	Battery voltage		\	I	I	I	I	I	I
	Seal performance of brake oil hose		I	I	I	I	I	I	I
	Brake fluid	2 years	I	I	I	I	I	I	I
	Brake fluid level		I	I	I	I	I	I	I
	Front & Rear brake pads		I	I	I	R	I	R	I
	Front & Rear brake switch		I	I	I	I	I	I	I
	Check the fuel evaporation system		I	I	I	I	I	I	I
	Check the flexibility for all fastening parts		I	I	I	I	I	I	I
	Check the leakage of front & rear shock absorber		I	I	I	I	I	I	I

Meaning of symbols：I：Inspection C：Clean R：Replacement A：Adjustment L：Lubrication

The first maintenance is 1000KM, and then 6000Km each.

VII.Motorcycle washing

Periodic washing enables to prevent colour fading, also convenient for checking vehicle damage or oil leakage.

Caution：High water pressure may damage parts, which shown as below：

— Wheel hubs

— Exhaust pipe

— Fuel tank and lower part of seat

— Carburetor

— Head lock and ignition switch

— Mileage meter

(1) Motorcycle should be washed by pure water after scrubbed, clean up remaining dirt for preventing rust. Plastic parts should be wiped up by cloth or sponge with neutral cleaning fluid and then wash by pure water.

(2) Dry the motorcycle in the air and then lubricate chain, and idly rotate for minutes.

(3) Repeatedly check brake system before driving, if necessary, immediate repair and adjustment is needed.

VIII.Maintenance during parking period

Storage and maintenance

In case long-term storage is needed, pay attention to dampproof, sun-block, and rain-proof for avoiding damage.Make special inspection on important parts before storage.

1. Replace lubricant.
2. Lubricate the chain.
3. Drain off fuel in carburetor and fuel tank, turn off fuel lock, and then fulfill rust preventive liquid in fuel tank and cover up the fuel cap. For motorcycle parking more than 1 moth, drain off fuel in carburetor.

Caution:

Fuel is combustible，turn off engine before adding or draining off fuel, smoking is not allowed in the place of adding or storing fuel.

4. Remove spark plug and add pure lubricant by 15～20mL，and then screw up.
5. Remove battery and put in cool and ventilated place, charge per month as suggestion.
6. Scrub motorcycle and spray dye-fixing agent on coloured parts, and spread anti-rust oil on rustable parts.
7. Inflate according to stipulated air pressure, underlay the motorcycle untill wheels away from gound.
8. Cover the motorcycle.

Recovery of using

1. Remove the covering cloth, and wipe up motorcycle, in case parking more than 4 months, replace lubricant.
2. Charge the battery and then install on motorcycle.
3. Drain off anti-rust liquid in fuel tank and then fully add fuel.
4. Carefully check motorcycle before driving, and make trial driving with low speed in safe place.

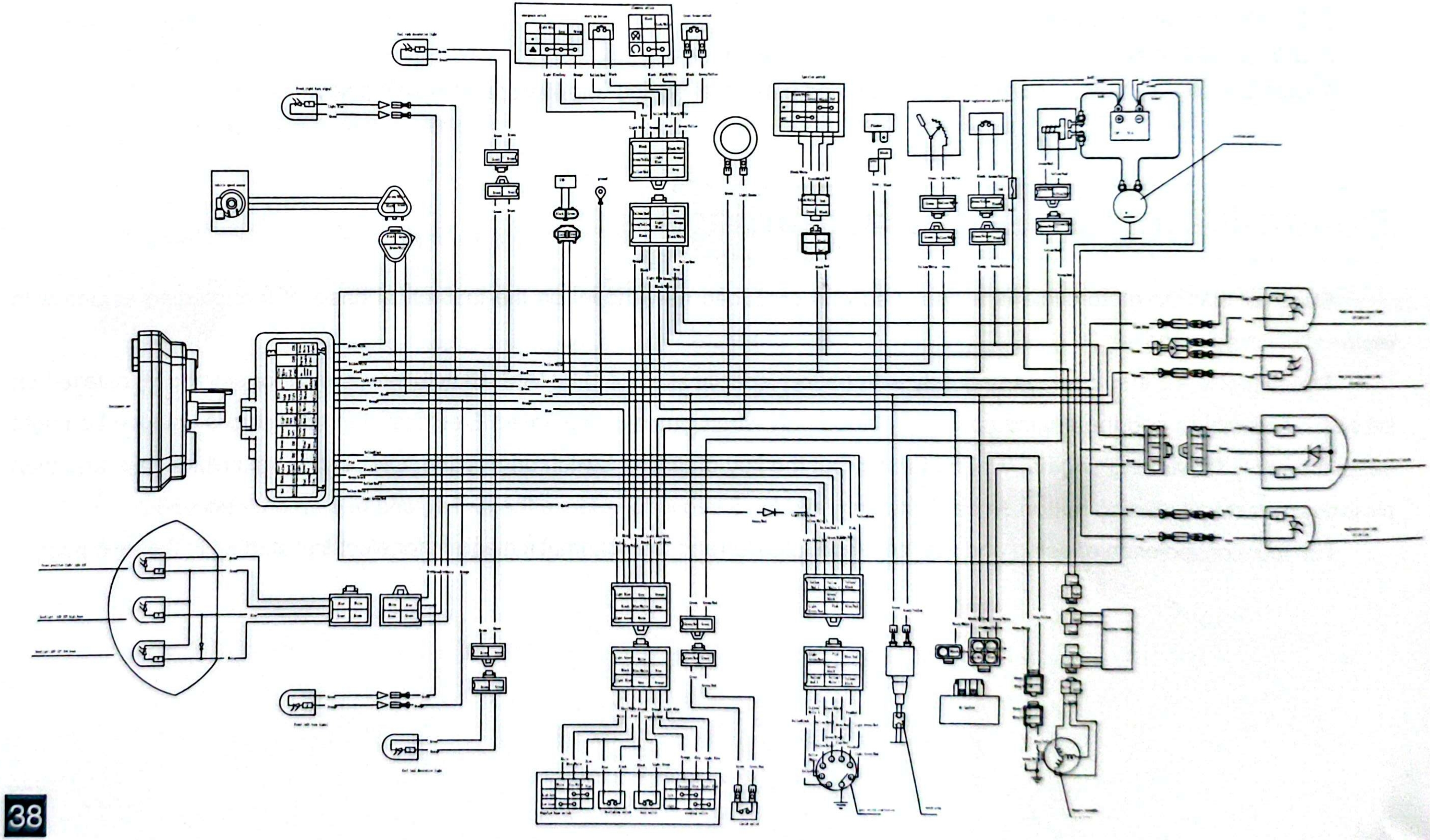
IX.Introduction of electrical starting

Electrical starting motorcycle is a designed and produced new model on the theoretical basis of foot starting engine with improved electrical parts.

This model is for electrical starting only with battery specification of “12V7Ah”. Clutch lever switch for starting is installed on left switch assembly，and the engine could be started only when clutch is separated. Electrical starting button is equipped on right switch assembly for starting engine. When starting, put the key of master switch on position “ON”, tightly hold clutch grip, and then press down electrical starting button. In case starting failed in 5 seconds, release the switch, and re-start after seconds.

For your convenience of using and maintenance, please read the schematic diagram for electrical starting in the next page:

X.Electrical schematic diagram



Pay a special attention to

1. Please check the voltage between the battery's + and – poles, and it is allowed to do power charge if the voltage is above 5V;

2. It is recommended to charge the battery with an adjustable digital display power charger. Set the charger's voltage to 16~17V to charge for 40 minutes, and it is to activate the battery with a high voltage;

3. If there is no charge current detected after 40 minutes' high voltage activation, that indicates the battery is invalid. And if the charge current is detected after the high voltage activation is stopped, please adjust the charge voltage to a constant voltage of 14~14.5V to charge the battery;

4. When the charge current is up to about 2A, set the charger's current to a constant current of 2A to charge. That is, use a constant voltage of 14~14.5V and a constant current of 2A to do the power charge. Till the charge current gets down to about 0.2A, that indicates the battery is full, then stop charge it.

5. Put aside the battery for about 1 hour, and then check the voltage between its 2 poles. If the voltage is above 12V, that means the battery is ready for service, otherwise, it means the battery is invalid.

Thanks for cooperation!